

INDEX

A

Absorption Cycle, Air-Cooled, by R. H. MERRICK and R. A. ENGLISH	339
Accountant's Report	49
Activated Charcoal to Decrease Odor and Odor Transfer in Domestic Refrigerators, Use of, by AARON L. BRODY, JESS W. THOMAS and LOIS LAFEVER	217
Air Conditioner, Gas-Fired Open Cycle, by B. E. EAKIN and R. T. ELLINGTON	319
Air-Cooled Absorption Cycle, by R. H. MERRICK and R. A. ENGLISH	339
Discussion	346
Alaska Summer Weather Data, by ROBERT BURGGAUF	240
Discussion	247
ALBRIGHT, L. F., T. C. DOODY, P. C. BUCLEZ and C. R. PLUCHE, Solubility of Refrigerants 11, 21 and 22 in Organic Solvents Containing an Oxygen Atom	423
Analysis of the Necessity to Insulate Floors of Cold Storage Rooms at 35 F, by J. D. HOVANESIAN, H. F. PFOET and C. W. HALL	69
Discussion	78
Apple Cooling Rates, Packed in Different Bushel Containers and Stacked at Different Spacings in Cold Storage, D. V. FISHER	414
ASHRAE By-laws	39
ASHRAE Membership	60
ASHRAE Semiannual Meeting, 1960 (Dallas, Texas)	61
ASHRAE Sixty-seventh Annual Meeting, 1960 (Vancouver, B. C.)	309
Attenuation and Generation of Sound in Elbows with Turning Vanes, by W. F. KERKA	129
Discussion	152

B

BAKER, J. T., C. M. HUMPHREYS and B. H. JENNINGS, Saturated Steam Flow in Copper Tubing	167
BAKER, MERL and J. M. ELLIOTT, Heat Loss from a Heated Basement	400
Basement, Heat Loss from a Heated, by J. M. ELLIOTT and MERL BAKER	400
BEACHAM, E. A., W. O. KRAUSE and A. B. GUISE, Time Factors in the Removal of Moisture from Refrigerating Systems with Desiccant Type Driers	465
BRODY, AARON L., JESS W. THOMAS and LOIS LAFEVER, Use of Activated Charcoal to Decrease Odor and Odor Transfer in Domestic Refrigerators	217
BROWN, W. G. and C. WACHMANN, Draft Performance of Chimneys	154
BUCLEZ, P. C., L. F. ALBRIGHT, T. C. DOODY and C. R. PLUCHE, Solubility of Refrigerants 11, 21 and 22 in Organic Solvents Containing an Oxygen Atom	423
BURGGAUF, ROBERT, Alaska Summer Weather Data	240
By-laws	39

C

Chimneys, Draft Performance of, by W. G. BROWN and C. WACHMANN	154
Cold Storage Rooms, An Analysis of the Necessity to Insulate Floors of at 35 F, by J. D. HOVANESIAN, H. F. PFOET and C. W. HALL	69
Comfort Range, Sensation Responses to Temperature and Humidity under Still Air Conditions in, Environmental Study II, by WALTER KOCH, B. H. JENNINGS and C. M. HUMPHREYS	264

INDEX

A

Absorption Cycle, Air-Cooled, by R. H. MERRICK and R. A. ENGLISH	339
Accountant's Report	49
Activated Charcoal to Decrease Odor and Odor Transfer in Domestic Refrigerators, Use of, by AARON L. BRODY, JESS W. THOMAS and LOIS LAFEVER	217
Air Conditioner, Gas-Fired Open Cycle, by B. E. EAKIN and R. T. ELLINGTON	319
Air-Cooled Absorption Cycle, by R. H. MERRICK and R. A. ENGLISH	339
Discussion	346
Alaska Summer Weather Data, by ROBERT BURGGAUF	240
Discussion	247
ALBRIGHT, L. F., T. C. DOODY, P. C. BUCLEZ and C. R. PLUCHE, Solubility of Refrigerants 11, 21 and 22 in Organic Solvents Containing an Oxygen Atom	423
Analysis of the Necessity to Insulate Floors of Cold Storage Rooms at 35 F, by J. D. HOVANESIAN, H. F. PFOET and C. W. HALL	69
Discussion	78
Apple Cooling Rates, Packed in Different Bushel Containers and Stacked at Different Spacings in Cold Storage, D. V. FISHER	414
ASHRAE By-laws	39
ASHRAE Membership	60
ASHRAE Semiannual Meeting, 1960 (Dallas, Texas)	61
ASHRAE Sixty-seventh Annual Meeting, 1960 (Vancouver, B. C.)	309
Attenuation and Generation of Sound in Elbows with Turning Vanes, by W. F. KERKA	129
Discussion	152

B

BAKER, J. T., C. M. HUMPHREYS and B. H. JENNINGS, Saturated Steam Flow in Copper Tubing	167
BAKER, MERL and J. M. ELLIOTT, Heat Loss from a Heated Basement	400
Basement, Heat Loss from a Heated, by J. M. ELLIOTT and MERL BAKER	400
BEACHAM, E. A., W. O. KRAUSE and A. B. GUISE, Time Factors in the Removal of Moisture from Refrigerating Systems with Desiccant Type Driers	465
BRODY, AARON L., JESS W. THOMAS and LOIS LAFEVER, Use of Activated Charcoal to Decrease Odor and Odor Transfer in Domestic Refrigerators	217
BROWN, W. G. and C. WACHMANN, Draft Performance of Chimneys	154
BUCLEZ, P. C., L. F. ALBRIGHT, T. C. DOODY and C. R. PLUCHE, Solubility of Refrigerants 11, 21 and 22 in Organic Solvents Containing an Oxygen Atom	423
BURGGAUF, ROBERT, Alaska Summer Weather Data	240
By-laws	39

C

Chimneys, Draft Performance of, by W. G. BROWN and C. WACHMANN	154
Cold Storage Rooms, An Analysis of the Necessity to Insulate Floors of at 35 F, by J. D. HOVANESIAN, H. F. PFOET and C. W. HALL	69
Comfort Range, Sensation Responses to Temperature and Humidity under Still Air Conditions in, Environmental Study II, by WALTER KOCH, B. H. JENNINGS and C. M. HUMPHREYS	264

Comparative Study of the Manufacturing Costs of Thermoelectric and Mechanical Refrigerating Systems, by D. W. SCOFIELD, P. F. TAYLOR and L. A. STAEBLER	494
Discussion	507
Compressor Characteristics, Effect of, on Motor Performance, by ERIK H. JENSEN	194
Cooling Rates of Apples Packed in Different Bushel Containers and Stacked at Different Spacings in Cold Storage, by D. V. FISHER	414
Discussion	422
Copper Tubing, Saturated Steam Flow in, C. M. HUMPHREYS, J. T. BAKER and B. H. JENNINGS	167

D

Determination of Moisture in Fluorocarbons, by JOSEPH D. MORTON and LAURA K. FUCHS	434
Discussion	444
Digital Computer, Muffler Analysis, by D. F. MILLER and B. W. HATTEN	202
DOELLING, NORMAN, Noise Reduction Characteristics of Package Attenuators for Air-Conditioning Systems	114
DOODY, T. C., L. F. ALBRIGHT, P. C. BUCLEZ and C. R. PLUCHE, Solubility of Refrigerants 11, 21 and 22 in Organic Solvents Containing an Oxygen Atom	423
DOWNING, G. V., JR., Production Control Testing of Thermoelectric Materials	477
Draft Performance of Chimneys, by W. G. BROWN and C. WACHMANN	154
Driers, Desiccant-Type, Time Factors in the Removal of Moisture from Refrigerating Systems, by W. O. KRAUSE, A. B. GUISE and E. A. BEACHAM	465
Dual Solution System—A Different Approach to Some of the Problems of Air Conditioning, by F. H. HIBBERD	348
Discussion	358

E

EAKIN, B. E. and R. T. ELLINGTON, Gas-Fired Open Cycle Air Conditioner	319
Effect of Compressor Characteristics on Motor Performance, by ERIK H. JENSEN	194
Discussion	201
Electronic Computer Aids Calculation of Reaction Forces in a Scotch Yoke, by V. G. FORIS and B. W. HATTEN	391
ELLINGTON, R. T. and B. E. EAKIN, Gas-Fired Open Cycle Air Conditioner	319
ELLIOTT, J. M. and MERL BAKER, Heat Loss from a Heated Basement	400
ENGLISH, R. A. and R. H. MERRICK, Air-Cooled Absorption Cycle	339
Environmental Study II—Sensation Responses to Temperature and Humidity under Still Air Conditions in the Comfort Range, by WALTER KOCH, B. H. JENNINGS and C. M. HUMPHREYS	264
Discussion	282

F

FISHER, D. V., Cooling Rates of Apples Packed in Different Bushel Containers and Stacked at Different Spacings in Cold Storage	414
Fluorocarbons, Determination of Moisture in, by JOSEPH D. MORTON and LAURA K. FUCHS	434
FORIS, V. G. and B. W. HATTEN, Electronic Computer Aids Calculation of Reaction Forces in a Scotch Yoke	391
Frost Formation on Refrigeration Coils, by W. F. STOECKER	91
Discussion	102

Frost Formation upon a Thin Aluminum Tank Containing Liquid Oxygen, by J. L. LOPER	104
Discussion	113
FUCHS, LAURA K. and JOSEPH D. MORTON, Determination of Moisture in Fluorocarbons	434

G

Gas-Fired Open Cycle Air Conditioner, by B. E. EAKIN and R. T. ELLINGTON ..	319
Discussion	338
GUISE, A. B., W. O. KRAUSE and E. A. BEACHAM, Time Factors in the Removal of Moisture from Refrigerating Systems with Desiccant Type Driers	465

H

HALL, C. W., J. D. HOVANESIAN and H. F. PFOST, Analysis of the Necessity to Insulate Floors of Cold Storage Rooms at 35 F.	69
HANDEGORD, G. O. and C. E. TILL, Proposed Humidity Standard	288
HATTEN, B. W. and D. F. MILLER, Muffler Analysis by Digital Computer	202
HATTEN, B. W. and V. C. FORIS, Electronic Computer Aids Calculation of Reaction Forces in a Scotch Yoke	391
Heat Exchangers, A Method of Comparing, by DONALD G. RICH	80
Heat Loss from a Heated Basement, by J. M. ELLIOTT and MERL BAKER	400
Discussion	412
HIBBERD, F. H., Dual Solution System—A Different Approach to Some of the Problems of Air Conditioning	348
High-Temperature Water Systems, Proposed Pipe Friction Chart for, by T. C. MIN and P. J. POTTER	374
HOVANESIAN, J. D., H. F. PFOST and C. W. HALL, Analysis of the Necessity to Insulate Floors of Cold Storage Rooms at 35 F.	69
HUCK, WILLIAM, Simplified Engineering Approach to Thermoelectric Heat Pumping	485
Humidity Standard, Proposed, by C. E. TILL and G. O. HANDEGORD	288
HUMPHREYS, C. M., J. T. BAKER and B. H. JENNINGS, Saturated Steam Flow in Copper Tubing	167
HUMPHREYS, C. M., WALTER KOCH and B. H. JENNINGS, Environmental Study II—Sensation Responses to Temperature and Humidity under Still Air Conditions in the Comfort Range	264
HUTCHINSON, A. V. In Memoriam	512

I

In Memoriam	509
Insulating Floors of Cold Storage Rooms at 35 F, Analysis of the Necessity to, by J. D. HOVANESIAN, H. F. PFOST and C. W. HALL	69

J

JENNINGS, B. H., C. M. HUMPHREYS and J. T. BAKER, Saturated Steam Flow in Copper Tubing	167
JENNINGS, B. H., WALTER KOCH and C. M. HUMPHREYS, Environmental Study II—Sensation Responses to Temperature and Humidity under Still Air Conditions in the Comfort Range	264
JENSEN, ERIK H., Effect of Compressor Characteristics on Motor Performance	194

K

KERKA, W. F., Attenuation and Generation of Sound in Elbows with Turning Vanes	129
KERKA, W. F., Re-Evaluation of the Steam-Pipe Size Tables for the ASHRAE GUIDE	183
KOCH, WALTER, B. H. JENNINGS and C. M. HUMPHREYS, Environmental Study II—Sensation Responses to Temperature and Humidity under Still Air Conditions in the Comfort Range	264
KRAUSE, W. O., A. B. GUISE and E. A. BEACHAM, Time Factors in the Removal of Moisture from Refrigerating Systems with Desiccant Type Driers	465

L

LAFEBER, LOIS, AARON L. BRODY and JESS W. THOMAS, Use of Activated Charcoal to Decrease Odor and Odor Transfer in Domestic Refrigerators ..	217
LEOPOLD, C. S., In Memoriam	515
LEVY, S. L., W. O. WALKER and S. ROSEN, Study of the Factors Influencing the Stability of Mixtures of Refrigerant 22 and Refrigerating Oils	445
Liquid Oxygen, Frost Formation upon a Thin Aluminum Tank Containing, by J. L. LOPER	104
LOPER, J. L., Frost Formation upon a Thin Aluminum Tank Containing Liquid Oxygen	104

M

Mechanical and Thermoelectric Refrigerating Systems, A Comparative Study of the Manufacturing Costs of, by D. W. SCOFIELD, P. F. TAYLOR and L. A. STAEBLER	494
MERRICK, R. H. and R. A. ENGLISH, Air-Cooled Absorption Cycle	339
Method of Comparing Heat Exchangers, by DONALD G. RICH	80
Discussion	89
MILLER, D. F. and B. W. HATTEN, Muffler Analysis by Digital Computer	202
MIN, T. C. and P. J. POTTER, Proposed Pipe Friction Chart for High-Temperature Water Systems	374
Moisture, Determination of in Fluorocarbons, by JOSEPH D. MORTON and LAURA K. FUCHS	434
Moisture, Time Factors in the Removal of from Refrigerating Systems with Desiccant Type Driers, by W. O. KRAUSE, A. B. GUISE and E. A. BEACHAM	465
MORTON, JOSEPH D., and LAURA K. FUCHS, Determination of Moisture in Fluorocarbons	434
Motor Performance, Effect of Compressor Characteristics on, by ERIK H. JENSEN	194
Muffler Analysis by Digital Computer, by D. F. MILLER and B. W. HATTEN ..	202
Discussion	216

N

Noise Reduction Characteristics of Package Attenuators for Air-Conditioning Systems, by NORMAN DOELLING	114
Discussion	126

O

Odor and Odor Transfer in Domestic Refrigerators, Use of Activated Charcoal to Decrease, by AARON L. BRODY, JESS W. THOMAS and LOIS LAFEBER ..	217
Officers and Board of Directors (February—June 1960)	5

Officers and Board of Directors (June 1960—February 1961).....	19
OZISIK, N. and L. F. SCHUTRUM, Solar Heat Gain Factors for Windows with Drapes	228
OZISIK, N. and L. F. SCHUTRUM, Solar Heat Gains through Slat-Type Between- Glass Shading Devices	359

P

Package Attenuators for Air Conditioning Systems, Noise Reduction Character- istics of, by NORMAN DOELLING	114
PFOST, H. F., J. D. HOVANESIAN and C. W. HALL, Analysis of the Necessity to Insulate Floors of Cold Storage Rooms at 35 F.	69
Pipe Friction Chart, Proposed, for High-Temperature Water Systems, by T. C. MIN and P. J. POTTER	374
PLUCHE, C. R., L. F. ALBRIGHT, T. C. DOODY and P. C. BUCLEZ, Solubility of Refrigerants 11, 21 and 22 in Organic Solvents Containing an Oxygen Atom	423
POTTER, P. J. and T. C. MIN, Proposed Pipe Friction Chart for High-Tempera- ture Water Systems	374
Production Control Testing of Thermoelectric Materials, by G. V. DOWNING, JR. Discussion	477 483
Proposed Humidity Standard, by C. E. TILL and G. O. HANDEGORD	288
Discussion	305
Proposed Pipe Friction Chart for High-Temperature Water Systems, by T. C. MIN and P. J. POTTER	374
Discussion	387

R

Rational Method of Determining Summer Weather Design Data, by H. C. S. THOM	248
Discussion	261
Re-Evaluation of the Steam-Pipe Size Tables for the ASHRAE GUIDE, by W. F. KERKA	183
Refrigerant 22 and Refrigerating Oils, A Study of the Factors Influencing the Stability of Mixtures of, by W. O. WALKER, S. ROSEN and S. L. LEVY	445
Refrigerants 11, 21 and 22, Solubility of in Organic Solvents Containing an Oxygen Atom, by L. F. ALBRIGHT, T. C. DOODY, P. C. BUCLEZ and C. R. PLUCHE	423
Refrigeration Coils, Frost Formation on, by W. F. STOECKER	91
Report of the Research and Technical Committee	55
Research and Technical Committee, Report of	55
RICH, DONALD G., Method of Comparing Heat Exchangers	80
ROSEN, S., W. O. WALKER and S. L. LEVY, Study of the Factors Influencing the Stability of Mixtures of Refrigerant 22 and Refrigerating Oils	445

S

Saturated Steam Flow in Copper Tubing, by C. M. HUMPHREYS, J. T. BAKER and B. H. JENNINGS	167
Discussion	182
SCHUTRUM, L. F. and N. OZISIK, Solar Heat Gain Factors for Windows with Drapes	228
SCHUTRUM, L. F. and N. OZISIK, Solar Heat Gains through Slat-Type Between- Glass Shading Devices	359

SCOFIELD, D. W., P. F. TAYLOR and L. A. STAEBLER, Comparative Study of the Manufacturing Costs of Thermoelectric and Mechanical Refrigerating Systems	494
Scotch Yoke, Electronic Computer Aids Calculation of Reaction Forces in, by V. G. FORIS and B. W. HATTEN	391
Sensation Responses to Temperature and Humidity under Still Air Conditions in the Comfort Range—Environmental Study II, by WALTER KOCH, B. H. JENNINGS and C. M. HUMPHREYS	264
Shading Devices, Solar Heat Gains through Slat-Type Between-Glass, by N. OZISIK and L. F. SCHUTRUM	359
Simplified Engineering Approach to Thermoelectric Heat Pumping, by WILLIAM HUCK	485
Discussion	493
Solar Heat Gain Factors for Windows with Drapes, by N. OZISIK and L. F. SCHUTRUM	228
Discussion	239
Solar Heat Gains through Slat-Type Between-Glass Shading Devices, by N. OZISIK and L. F. SCHUTRUM	359
Discussion	372
Solubility of Refrigerants 11, 21 and 22 in Organic Solvents Containing an Oxygen Atom, by L. F. ALBRIGHT, T. C. DOODY, P. C. BUCLEZ and C. R. PLUCHE	423
Discussion	432
Sound, Attenuation and Generation of in Elbows with Turning Vanes, by W. F. KERKA	129
STAEBLER, L. A., D. W. SCOFIELD and P. F. TAYLOR, Comparative Study of the Manufacturing Costs of Thermoelectric and Mechanical Refrigerating Systems	494
Steam-Pipe Size Tables for the ASHRAE GUIDE, Re-Evaluation of, by W. F. KERKA	183
Steam, Saturated, Flow in Copper Tubing, by C. M. HUMPHREYS, J. T. BAKER and B. H. JENNINGS	167
STOECKER, W. F., Frost Formation on Refrigeration Coils	91
Study of the Factors Influencing the Stability of Mixtures of Refrigerant 22 and Refrigerating Oils, by W. O. WALKER, S. ROSEN and S. L. LEVY	445
Discussion	463

T

TAYLOR, P. F., D. W. SCOFIELD and L. A. STAEBLER, Comparative Study of the Manufacturing Costs of Thermoelectric and Mechanical Refrigerating Systems	494
Thermoelectric and Mechanical Refrigerating Systems, a Comparative Study of the Manufacturing Costs of, by D. W. SCOFIELD, P. F. TAYLOR and L. A. STAEBLER	494
Thermoelectric Heat Pumping, a Simplified Engineering Approach to, by WILLIAM HUCK	485
Thermoelectric Materials, Production Control Testing of, by G. V. DOWNING, JR.	477
THOM, H. C. S., Rational Method of Determining Summer Weather Design Data	248
THOMAS, JESS W., AARON L. BRODY and LOIS LAFEVER, Use of Activated Charcoal to Decrease Odor and Odor Transfer in Domestic Refrigerators	217
TILL, C. E. and G. O. HANDEGORD, Proposed Humidity Standard	288
Time Factors in the Removal of Moisture from Refrigerating Systems with Desiccant Type Driers, by W. O. KRAUSE, A. B. GUISE and E. A. BEACHAM	465
Discussion	476